

Title (en)

QUARLS IN A BURNER

Title (de)

BRENNERSTEINE IN EINEM BRENNER

Title (fr)

ENTOURAGES DE BRÛLEUR

Publication

EP 2263043 B1 20130123 (EN)

Application

EP 09728028 A 20090326

Priority

- EP 2009053560 W 20090326
- EP 08006657 A 20080401
- EP 09728028 A 20090326

Abstract (en)

[origin: EP2107309A1] The invention relates to a quarl of a burner (1) for a gas turbine engine, in which fuel and air is mixed and provided to the burner (1) and wherein a quarl (4a, 4b, 4c) is arranged to house a main flame (7). It is one object to improve stability of the combustion process. According to the invention stability is achieved by a quarl, which is formed from a plurality of quarl sections (4a, 4b, 4c), wherein each quarl section (4a, 4b, 4c) has the configuration of the conical shell of a truncated cone and being distributed consecutively one after the other in the downstream direction of the burner (1), wherein a most narrow part of the shell of a downstream quarl section (4b) surrounds the widest part of the shell of the closest upstream quarl section (4a) and wherein an annular channel (10, 11) for premixed air and fuel is arranged between two consecutive quarl sections (4a, 4b).

IPC 8 full level

F23R 3/28 (2006.01); **F23R 3/34** (2006.01)

CPC (source: EP US)

F23R 3/286 (2013.01 - EP US); **F23R 3/346** (2013.01 - EP US); **F23R 2900/00017** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2107309 A1 20091007; CN 101981378 A 20110223; CN 101981378 B 20130206; EP 2263043 A1 20101222; EP 2263043 B1 20130123; ES 2402333 T3 20130430; RU 2010144581 A 20120510; RU 2460944 C2 20120910; US 2011016867 A1 20110127; US 8561409 B2 20131022; WO 2009121778 A1 20091008

DOCDB simple family (application)

EP 08006657 A 20080401; CN 200980111259 A 20090326; EP 09728028 A 20090326; EP 2009053560 W 20090326; ES 09728028 T 20090326; RU 2010144581 A 20090326; US 93592109 A 20090326